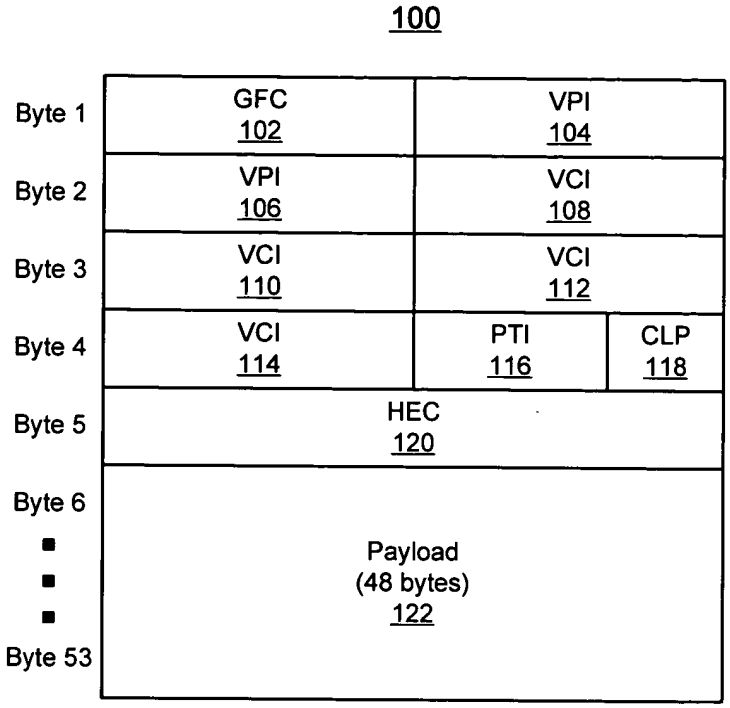


Conventional ATM cell (53 bytes)

Fig. 1
(prior art)

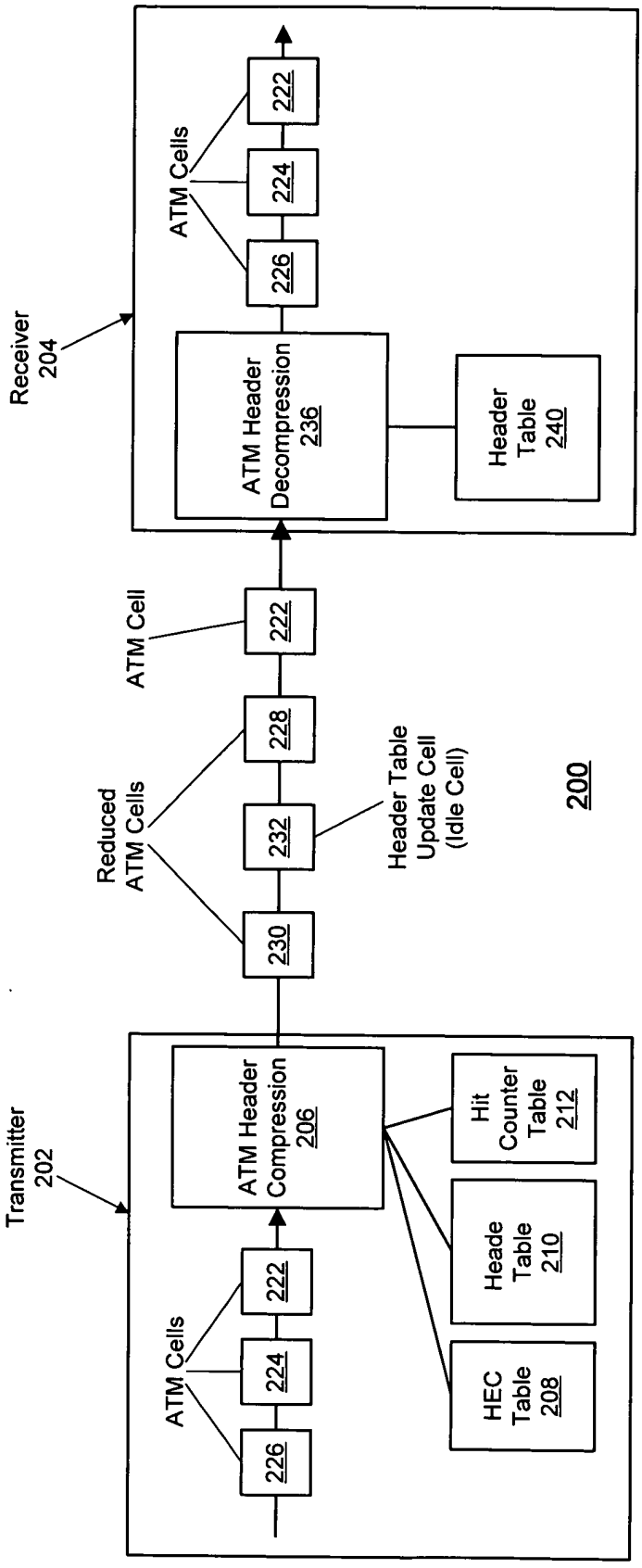
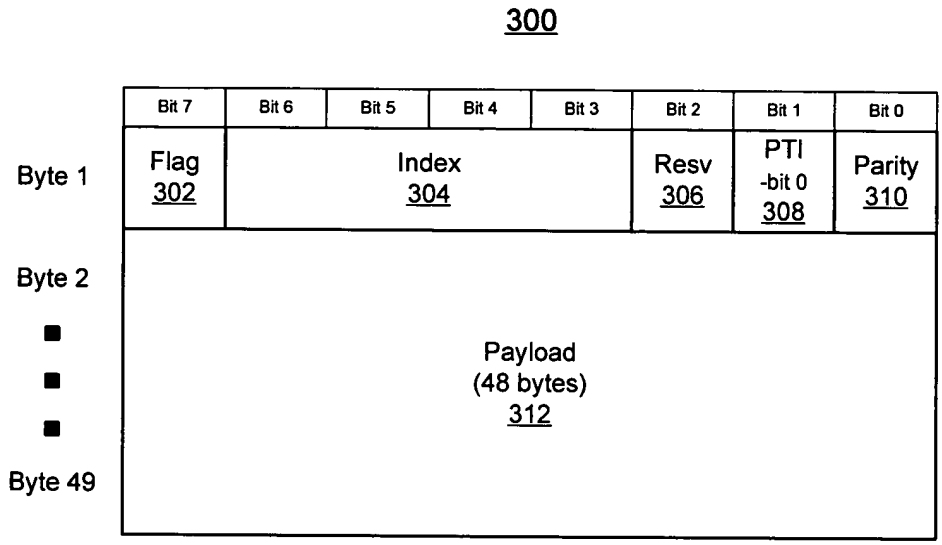

Transmitter
202
ATM Cells
222
224
226
ATM Header
Compression
206
HEC
Table
208
Heade
Table
210
Hit
Counter
Table
212
Reduced
ATM Cells
228
232
230
Header Table
Update Cell
(Idle Cell)
ATM Cell
222
Receiver
204
ATM Cells
222
224
226
ATM Header
Decompression
236
Header
Table
240
200

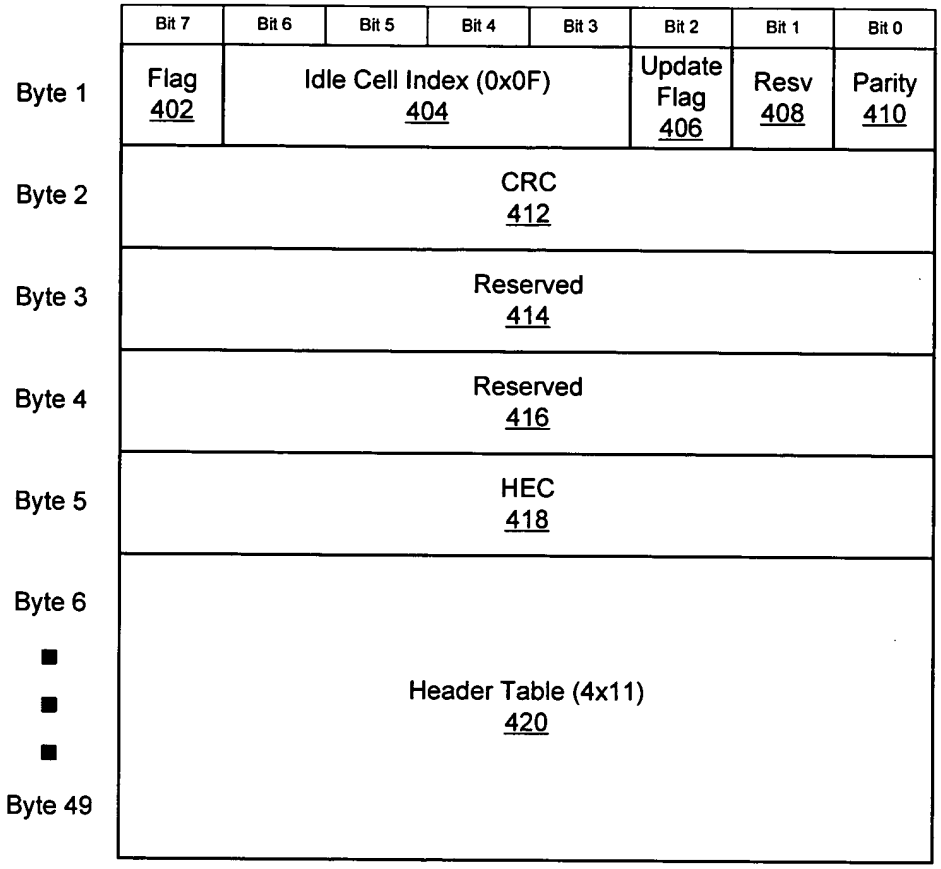
Fig. 2



Reduced ATM cell (49 bytes)

Fig. 3

400



Idle cell (49 bytes)

Fig. 4

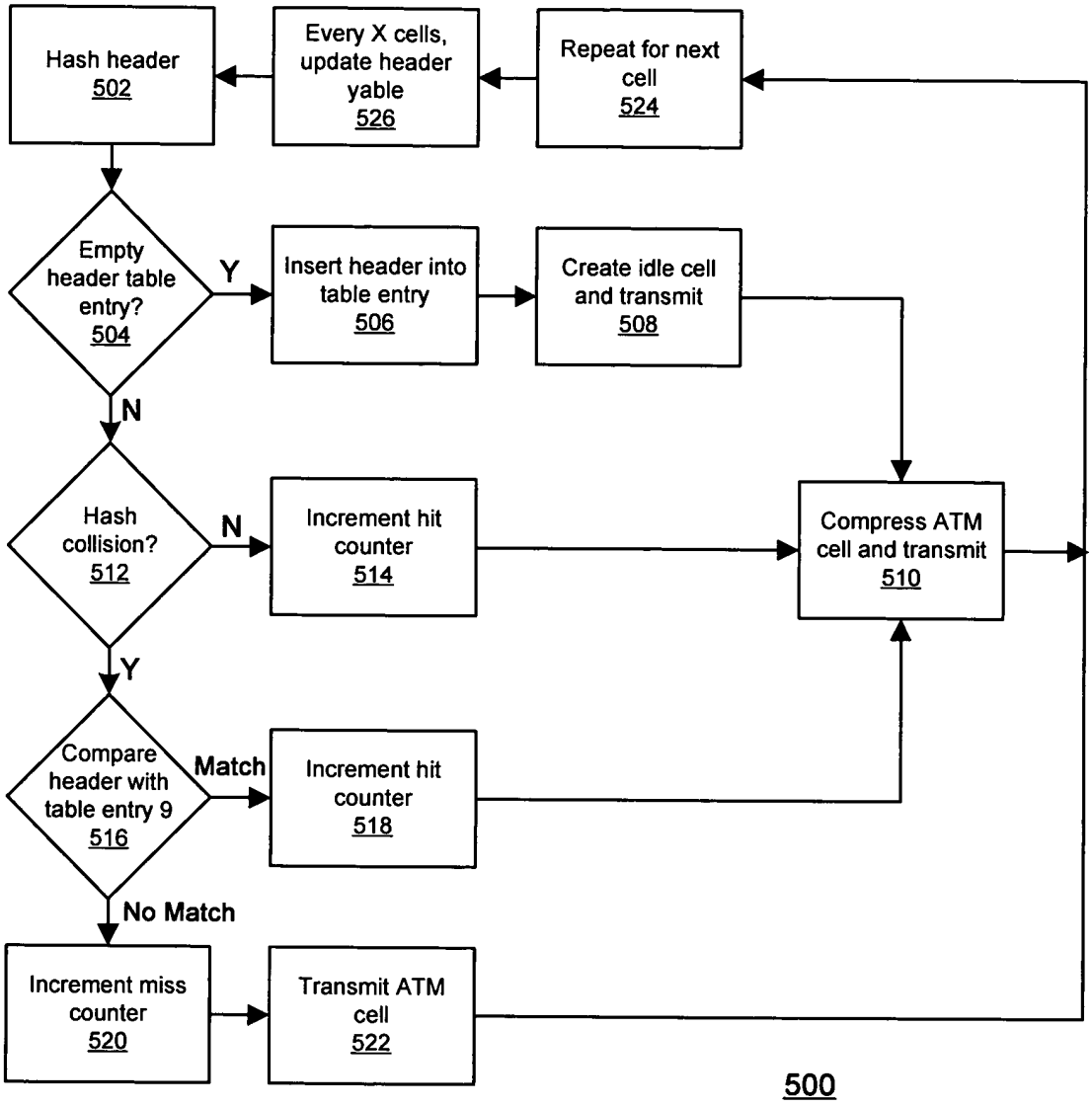

Hash header
502
Every X cells, update header yable
526
Repeat for next cell
524
Empty header table entry?
504
Y
Insert header into table entry
506
Create idle cell and transmit
508
N
Hash collision?
512
N
Increment hit counter
514
Compress ATM cell and transmit
510
Y
Compare header with table entry 9
516
Match
Increment hit counter
518
No Match
Increment miss counter
520
Transmit ATM cell
522
500

Fig. 5

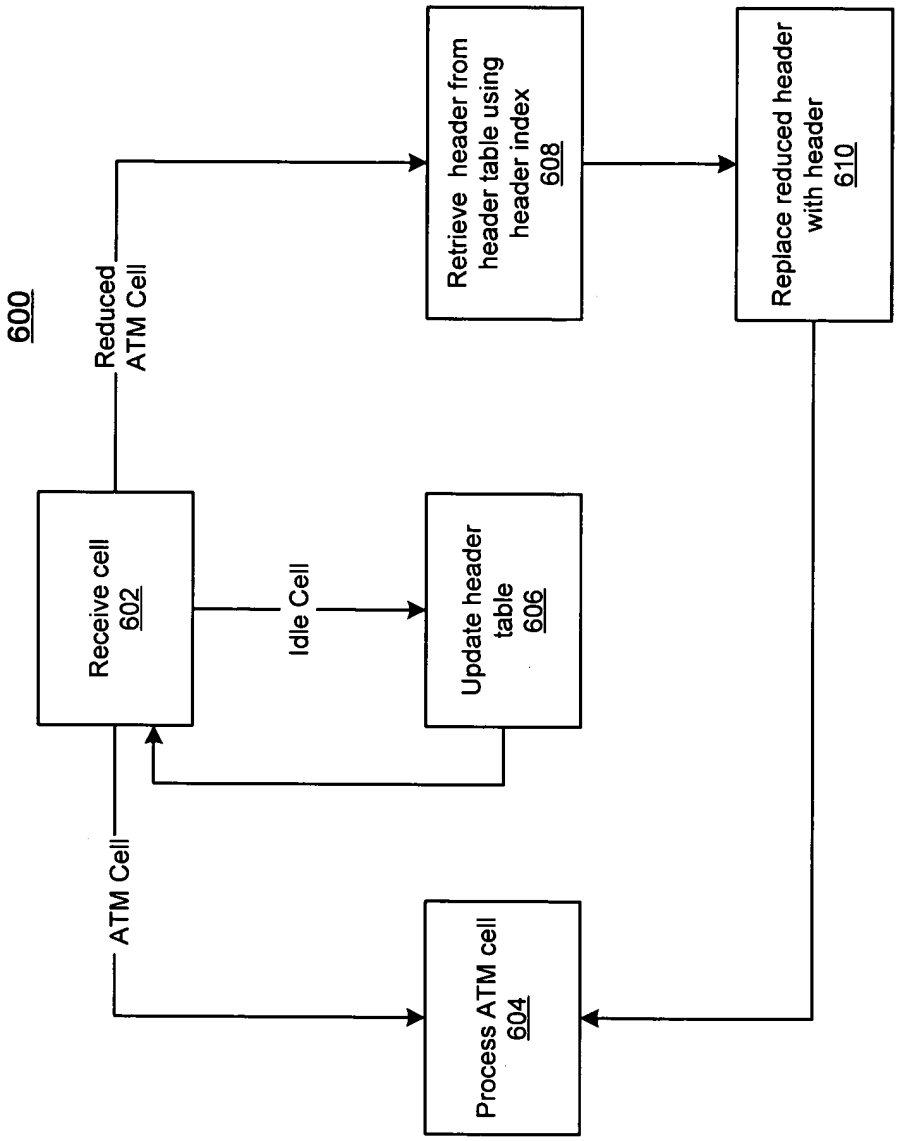

600
Reduced ATM Cell
Retrieve header from header table using header index 608
Replace reduced header with header 610
Receive cell 602
Idle Cell
Update header table 606
ATM Cell
Process ATM cell 604

Fig. 6